Amendments to and Listing of the Claims:

1. (Previously Presented) A hydrogen refinement apparatus comprising a source of reformed gas containing at least a hydrogen gas, carbon monoxide and water vapor, and a reaction chamber equipped with a carbon monoxide shifting catalyst body positioned downstream from said reformed gas source,

wherein said carbon monoxide shifting catalyst body comprises a carrier composed of at least one oxide of a metal selected from the group consisting of Ce, Zr and Ti, having a BET specific surface area of at least 10 m^2/g and Pt supported thereon, such that carbon monoxide in said reformed gas is capable of being reduced by a shift reaction in said reaction chamber.

2. (Original) The hydrogen refinement apparatus in accordance with claim 1, wherein the BET specific surface area of said carrier is 250 m^2/g or less.

3. (Canceled)

4. (Original) The hydrogen refinement apparatus in accordance with claim 1, wherein said metal oxide contains Ce.

5. (Original) The hydrogen refinement apparatus in accordance with claim 4, wherein said metal oxide contains Zr.

6. (Previously Presented) A hydrogen refinement apparatus in accordance with claim 1, wherein said carbon monoxide shifting catalyst body comprises a carrier supporting Pd, Rh or Ru in an amount of 0.1 to 0.5 fold by weight based on Pt, in addition to Pt.

7. (Currently Amended) A method for operating a hydrogen refinement apparatus comprising a source of reformed gas containing at least a hydrogen gas, carbon monoxide, and water vapor and a reaction chamber equipped with a carbon monoxide shifting catalyst body positioned downstream from said reformed gas source; said carbon monoxide

15. (Previously Presented) The method of claim 7, further comprising the step of feeding water vapor such that an amount of water vapor contained in said reformed gas is from about 24% to about 50% by volume.- -